

## REMARKS

Applicants and Applicants' attorney express appreciation to the Examiner for the courtesies extended during the recent interview held on August 25, 2004. The amendments and arguments presented in this paper are consistent with the proposed amendments and arguments discussed during the Interview.

Claims 1-44 and 46-50 are pending, of which claims 1, 36, and 46 are independent method claims, claim 38 is an independent computer program product claim corresponding to independent method claim 1, and claim 43 is an independent system claim. As indicated above, claims 1, 4, 36, 38, 43, and 46 have been amended and claim 45 has been canceled by this paper.

The Office Action indicated that the Specification does not conform to 37 C.F.R. § 1.77(b) because section heading are underlined and boldfaced. In order to remove any ambiguity with respect to the appearance of section headings, Applicants have submitted a substitute Specification with this response that shows section heading in all capital letters, without being underlined or in boldface. As demonstrated by the accompanying marked-up version of the substitute Specification, no new matter has been added.

The Office Action rejected each of the now pending independent claims (1, 36, 38, 43, and 46) under 35 U.S.C. § 102(e)<sup>1</sup> as being unpatentable over U.S. Patent No. 6,195,662 to Ellis et al. ("*Ellis*") and rejected each of the remaining dependent claims as either anticipated by *Ellis* under 35 U.S.C. § 102(e) or as unpatentable over *Ellis* in view of U.S. Patent No. 6,654,747 to Van Huben et al. ("*Van Huben*"), U.S. Patent No. 6,684,204 to Lal ("*Lal*"), or U.S. Patent No. 6,377,952 to Inohara et al. ("*Inohara*").<sup>2</sup>

Applicants' invention, as claimed for example in independent method claim 1, relates to directly operating on data structures in a generic manner regardless of the type of data structure being operated upon and without requiring dedicated executable code for manipulating data structures of the particular data type. The method includes recognizing a common set of command methods that operate on data structures of a number of different data types corresponding to a plurality of applications and to a plurality of identities that control access to

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<sup>1</sup>Applicants note for the record that *Ellis*, subject to footnote 2, is also *prima facie* 35 U.S.C. § 102(a) art.

<sup>2</sup>Although the prior art status of the cited art is not being challenged at this time, Applicants reserve the right to do so in the future. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status or asserted teachings of the cited art.

the data structures; accessing a request to execute a command method on at least a portion of a data structure of a particular data type corresponding to one or more applications and to a particular identity, the command method being one of the common set of command methods, and the request to execute the command method identifying the data structure by identifying (i) the particular identity, (ii) a set of rules associated with the particular data type, and (iii) an instance to be operated upon if more than one instance of the particular data type exists for the particular identity; accessing the set of rules associated with the particular data type, the set of rules defining how data structures of the particular data type are organized, and what portions of data structure of the particular data type are allowed to have what commands executed thereon; finding the portion of the data structure that is to be operated upon by interpreting the request in light of the set of rules; determining that the command method is allowed to be implemented on the portion of the data structure by consulting the set of rules; and executing the command method on the found portion of the data structure. Claim 38 recites similar limitations from the perspective of a computer program product.

Applicants' invention, as claimed for example in independent method claim 36, also relates to a method for directly operating on data structures in a generic manner regardless of the type of data structure being operated upon and without requiring dedicated executable code for manipulating data structures of the particular data type. The method includes recognizing a common set of command methods that operate on data structures of a number of different data types corresponding to a plurality of applications and to a plurality of identities that control access to the data structures; accessing a request to execute a command method on at least a portion of a data structure of a particular data type corresponding to one or more applications and to a particular identity, the command method being one of the common set of command methods, and the request to execute the command method identifying the data structure by identifying (i) the particular identity, (ii) a set of rules associated with the particular data type, and (iii) an instance to be operated upon if more than one instance of the particular data type exists for the particular identity; and executing the command method on at least a portion of the data structure in accordance with a set of rules associated with the particular data type.

Similarly, Applicants' invention, as claimed for example in independent system claim 43, relates to a system for directly operating on data structures in a generic manner regardless of the type of data structure being operated upon and without requiring dedicated executable code for

manipulating data structures of the particular data type. The system includes a data structure of a particular data type corresponding to one or more applications, the data structure organized in accordance with a set of rules and associated with an identity; a navigation module configured to recognize a common set of command methods that may be used to operate on data structures of a number of different data types corresponding to a plurality of applications and to a plurality of identities that control access to the data structures, including the data structure of the particular data type, the navigation module identifying the data structure by identifying (i) the identity, (ii) the set of rules associated with the identity, and (iii) an instance to be operated upon if more than one instance of the particular data type exists for the identity, wherein the navigation module is communicatively coupled to the data structure in order to navigate through the data structure using the set of rules and perform any of the common set of command methods on the data structure; and a navigation assistance module communicatively coupled to the navigation module, the navigation assistance module containing the set of rules that describe the organization of the data structure.

Applicants' invention, as claimed for example in independent method claim 46, relates to a method for directly operating on data structures in a generic manner regardless of the type of data structure being operated upon and without requiring dedicated executable code for manipulating data structures of the particular data type. The method includes accessing a request to execute a command method on at least a portion of a data structure of a particular data type corresponding to one or more of a plurality of applications and to a particular identity that controls access to the data structure, the request identifying the data structure by identifying (i) the particular identity, (ii) a set of rules associated with the particular data type, and (iii) an instance to be operated upon if more than one instance of the particular data type exists for the particular identity; an act of accessing the set of rules associated with the particular data type, the set of rules defining how data structures of the particular data type are organized; and an act of executing the command method on a portion of the data structure determined by interpreting the request in light of the set of rules.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131. That is, "for anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly." MPEP § 706.02. Applicants also note that "[i]n

determining that quantum of prior art disclosure which is necessary to declare an applicant's invention 'not novel' or 'anticipated' within section 102, the stated test is whether a reference contains an 'enabling disclosure.'" MPEP § 2121.01. In other words, a cited reference must be enabled with respect to each claim limitation. During examination, the pending claims are given their broadest reasonable interpretation, *i.e.*, they are interpreted as broadly as their terms reasonably allow, consistent with the specification. MPEP §§ 2111 & 2111.01.

*Ellis* discloses a system and method for importing, transforming, and exporting data between distributed heterogeneous computer systems. Col. 1, l. 13-18. As shown in Figures 2 and 3, the system includes a configuration management user interface to define various components, including external data connections, views, data bags, rule sets, and scripts. Col. 4, ll. 33-40. A view is a logical subset of the content of an external data source. Col. 4, ll. 3-10. Data bags are used for storage and transformations of external data and contain both the definition of the data contained within the data bag and generic format data. Col. 4, ll. 11-14. Rule sets are used to transform a data bag in one format into another data bag of a different format. Col. 5, ll. 20-24. Scripts are defined to control data movement into and out of the system and to control data transformation within the system. Col. 5, ll. 65-67. Specifically, scripts contain various actions to be performed on data bags, such as loading a data source into an import data bag, exporting a data bag out to an external data target, merging data bags of the same bag type, joining one data bag into another data bag based on a matching key value, appending one data bag to another, copying one data bag to another, transforming one data bag into another data bag, and sorting the contents of a data bag. Col. 6, ll. 1-37. In one example, *Ellis* converts an Open Database Connectivity (ODBC) enabled database table into a delimited flat file. Col. 6, ll. 40-44; Figures 12 and 13.

Among other things, however, *Ellis* fails to teach, suggest, motivate or enable a common set of command methods that operate on data structures of a number of different data types corresponding to a plurality of applications and to a plurality of identifies that control access to the data structures, and fails to teach, suggest, motivate or enable accessing a request that identifies a data structure by identifying (i) an identity, (ii) a set of rules associated with a data type, and (iii) an instance to be operated upon if more than one instance of the particular data type exists for the particular identity, as recited in one form or another in each of the pending independent claims. The Examiner seemed to concur with this analysis during the Interview and

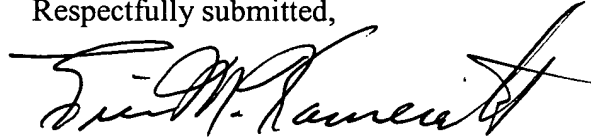
noted in the Interview Summary that the proposed amendments to the independent claims appear to overcome the present rejections and that the Examiner will update the search when a formal response is received.

Based on at least the foregoing reasons, Applicants respectfully submit that the cited prior art fails to anticipate or make obvious Applicants invention, as claimed for example, in independent claims 1, 36, 38, 43, and 46. Applicants note for the record that the remarks above render the remaining rejections of record for the independent and dependent claims moot, and thus addressing individual rejections or assertion with respect to the teachings of the cited art is unnecessary at the present time, but may be undertaken in the future if necessary or desirable, and Applicants reserve the right to do so.

In the event that the Examiner finds any remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 17<sup>th</sup> day of September, 2004.

Respectfully submitted,



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